TO: FAA Office of Rulemaking

FROM: Paul Hudson, Aviation Consumer Action Project
Member, FAA Aviation Rulemaking Advisory Committee, Executive Committee

DATE: April 12, 2002

RE: Comments on Fuel Tank Inerting Harmonization Working Group Final Report dated February 2002

The final report as did a prior report in 1998 unanimously found that (a) there is a substantial risk of explosion in airliner fuel tanks (center fuel tanks with adjacent heat sources representing about 90% of airliners were estimated to be in explosive condition 30% of the time in 1998 and 33% in 2001), (b) that fuel tank inerting provides clear safety benefits, and (c) that hundreds of lives would be saved otherwise who would be lost in air disasters caused by fuel tank explosions. Both reports admit that fuel tank inerting is technically feasible with variety of technologies. Such technologies have been used in military aviation for many years, but are not required or used in commercial aviation.

In addition to ACAP I am advised that EXCOM member NADA/F, several members of the Working Group and the manufacturers of various fuel tank inerting systems strongly disagree with the recommendation of the Working Group that fuel tank inerting should not required by the FAA but merely be the subject of further study and instead endorse the following ACAP recommendation:

ACAP recommends that the FAA promptly issue a regulation requiring that all commercial airliners certified to operate in the United States reduce the potential for fuel tank explosions to no more than 1% of their operating time as measured by FAA testing and recorded measurements of temperature and oxygen and fuel content of fuel tanks during operation. The Working Group failed to produce the regulatory language that was part of its tasking. This regulation should be phased in over the next three years so that industry may have time to adjust and select the most cost effective technologies to meet

the minimum 1% performance standard. The FAA should pre-approve systems that meet this standard but permit unapproved systems to also qualify by meeting stringent performance tests and monitoring. Most wing tanks currently operate in explosive condition 1% to 5% of their operating time. Such a standard is performance based, technology neutral and would cost far less to comply with than the alternatives. ACAP will submit a rulemaking petition in the next few weeks setting forth proposed regulatory language for consideration by the FAA.

There is strong disagreement on the cost benefit analyses, which range from 53: 1 to 1 : 3 depending on the assumptions used.

The finding of the working committee that the cost of mandating fuel tank inerting exceeds its benefits is deeply flawed. Flaws in the Working Group cost benefit analysis include (a) failure to account for increased risk of terrorist bombings of airliners, especially since the 9/11 attacks, (b) the unsubstantiated and unwarranted assumption that existing or proposed improvements (SFAR no. 88) will reduce the risk of fuel tank explosions by 75%, (c) the unrealistically low value placed on the benefit to society of one lost life in air travel based on a dated study of traffic fatalities, (d) the failure to properly account for lost revenue to the industry caused by public fear of flying after preventable air disasters and the cumulative loss of revenue to the travel and tourism industry caused by loss of public confidence in the safety of air travel and the low public tolerance for mass transportation disasters, (e) the risk of high punitive damage awards against aircraft manufacturers and airlines for willful failure to correct known safety design defects (e.g. adjacent heat sources to center fuel tanks producing explosive air fuel mixtures of over 140 degrees F.), (f) the lack of an economist with recognized credentials in cost benefit analysis to perform its study, (g) the high labor costs generated by assuming dedicated ground based inerting crews and a long time frame for fueling operations, and (h) the high failure rate assumed for aircraft based systems.

In accordance with the decision of the EXCOM and the minutes of the March 13, 2002 meeting dated March 18, 2002, it is respectfully requested that these comments be

included with the cover letter from the EXCOM chairman conveying the Working Group Report to the FAA as well as in the public record and available on line.